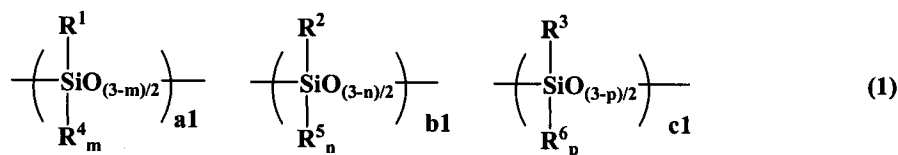


**Amendments to the Claims:**

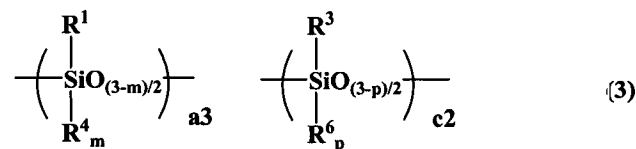
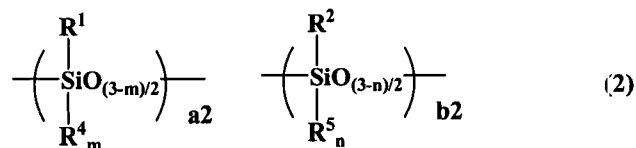
The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An anti-reflection film material used in lithography which contains at least a polymer compound having repeating units for copolymerization represented by the following general formula ~~(1)~~. (1):



~~(In the formula, wherein R<sup>1</sup> is a monovalent organic group having a crosslink group, R<sup>2</sup> is a monovalent organic group having a light-absorption group, and R<sup>3</sup> is a monovalent organic group which has at least one functional group selected from the group consisting of carbonyl, ester, lactone, amide, ether, and nitrile; a1, b1 and c1 are 0<a1<1, 0<b1<1, 0<c1<1, and 0.5≤a1+b1+c1≤1. Each 0.5≤a1+b1+c1≤1; each of R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> is a hydrogen atom, a hydroxy group, an alkyl group having 1-6 carbon atoms, an aryl group having 6-10 carbon atoms, or a fluorinated alkyl group having 1-6 carbon atoms. Each atoms; and each of m, n and p is 0 or 1. )~~

2. (Currently Amended) An anti-reflection film material used in lithography which contains at least a polymer compound having repeating units for copolymerization represented by the following general formula (2) and a polymer compound having repeating units for copolymerization represented by the following general formula ~~(3)~~. (3):



(~~In the formula,  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$ ,  $\text{R}^6$ ,  $m$ ,  $n$ , and  $p$  are as defined above.~~ wherein  $\text{R}^1$  is a monovalent organic group having a crosslink group,  $\text{R}^2$  is a monovalent organic group having a light-absorption group, and  $\text{R}^3$  is a monovalent organic group which has at least one functional group selected from the group consisting of carbonyl, ester, lactone, amide, ether, and nitrile; each of  $\text{R}^4$ ,  $\text{R}^5$ , and  $\text{R}^6$  is a hydrogen atom, a hydroxy group, an alkyl group having 1-6 carbon atoms, an aryl group having 6-10 carbon atoms, or a fluorinated alkyl group having 1-6 carbon atoms; each of  $m$ ,  $n$  and  $p$  is 0 or 1;  $a2$  and  $b2$  are  $0 < a2 < 1$ ,  $0 < b2 < 1$ , and  $0.5 \leq a2 + b2 \leq 1$ .  ~~$0.5 \leq a2 + b2 \leq 1$ ; and  $a3$  and  $c2$  are  $0 < a3 < 1$ ,  $0 < c2 < 1$ , and  $0.5 \leq a3 + c2 \leq 1$ .~~ )

3. (Original) The anti-reflection film material according to Claim 1 which further contains an organic solvent and/or an acid generating agent.

4. (Original) The anti-reflection film material according to Claim 2 which further contains an organic solvent and/or an acid generating agent.

5. (Original) The anti-reflection film material according to Claim 1 which further contains a crosslinking agent.

6. (Original) The anti-reflection film material according to Claim 2 which further contains a crosslinking agent.

7. (Original) The anti-reflection film material according to Claim 1 wherein the light-absorption group in the repeating unit of the polymer compound contained in the anti-reflection film material is an aromatic group or a group having a Si-Si bond.

8. (Original) The anti-reflection film material according to Claim 2 wherein the light-absorption group in the repeating unit of the polymer compound contained in the anti-reflection film material is an aromatic group or a group having a Si-Si bond.

9. (Original) A substrate which has at least an anti-reflection film obtained by baking the anti-reflection film material according to Claim 1 on the substrate.

10. (Original) A substrate which has at least an anti-reflection film obtained by baking the anti-reflection film material according to Claim 2 on the substrate.

11. (Original) A method for forming a pattern on a substrate by lithography comprising at least applying to the substrate an anti-reflection film material according to Claim 1 and baking the anti-reflection film material to form an anti-reflection film, applying to the anti-reflection film a photoresist film material and pre-baking the photoresist film material to form a photoresist film, exposing a pattern circuit range of the photoresist film, developing with a developer to form a resist pattern on the photoresist film, and etching the anti-reflection film and the substrate with using as a mask the photoresist film on which the resist pattern is formed to form a pattern on the substrate.

12. (Original) A method for forming a pattern on a substrate by lithography comprising at least applying to the substrate an anti-reflection film material according to Claim 2 and baking the anti-reflection film material to form an anti-reflection film, applying to the anti-reflection film a photoresist film material and pre-baking the

photoresist film material to form a photoresist film, exposing a pattern circuit range of the photoresist film, developing with a developer to form a resist pattern on the photoresist film, and etching the anti-reflection film and the substrate with using as a mask the photoresist film on which the resist pattern is formed to form a pattern on the substrate.

13. (Original) A method for forming a pattern on a substrate by lithography comprising at least applying to the substrate an anti-reflection film material according to Claim 1 and baking the anti-reflection film material to form an anti-reflection film, applying to the anti-reflection film a photoresist film material and pre-baking the photoresist film material to form a photoresist film, exposing a pattern circuit range of the photoresist film, developing with a developer to form a resist pattern on the photoresist film, etching the anti-reflection film with using as a mask the photoresist film on which the resist pattern is formed, and etching the substrate with using as a mask the anti-reflection film on which the pattern is formed, to form a pattern on the substrate.

14. (Original) A method for forming a pattern on a substrate by lithography comprising at least applying to the substrate an anti-reflection film material according to Claim 2 and baking the anti-reflection film material to form an anti-reflection film, applying to the anti-reflection film a photoresist film material and pre-baking the photoresist film material to form a photoresist film, exposing a pattern circuit range of the photoresist film, developing with a developer to form a resist pattern on the photoresist film, etching the anti-reflection film with using as a mask the photoresist film on which the resist pattern is formed, and etching the substrate with using as a

mask the anti-reflection film on which the pattern is formed, to form a pattern on the substrate.

15. (Original) A method for forming a pattern on a substrate by lithography comprising at least, forming an organic film on the substrate, applying to the organic film the anti-reflection film material of Claim 1 and baking the anti-reflection film material to form an anti-reflection film, applying a photoresist film material to the anti-reflection film and pre-baking the photoresist film material to form a photoresist film, exposing a pattern circuit range of the photoresist film, developing with a developer to form a resist pattern on the photoresist film, etching the anti-reflection film using as a mask the photoresist film on which the resist pattern is formed, etching the organic film using as a mask the anti-reflection film on which the pattern is formed, and etching the substrate to form a pattern on the substrate.

16. (Original) A method for forming a pattern on a substrate by lithography comprising at least, forming an organic film on the substrate, applying to the organic film the anti-reflection film material of Claim 2 and baking the anti-reflection film material to form an anti-reflection film, applying a photoresist film material to the anti-reflection film and pre-baking the photoresist film material to form a photoresist film, exposing a pattern circuit range of the photoresist film, developing with a developer to form a resist pattern on the photoresist film, etching the anti-reflection film using as a mask the photoresist film on which the resist pattern is formed, etching the organic film using as a mask the anti-reflection film on which the pattern is formed, and etching the substrate to form a pattern on the substrate.